

MICHIGAN EDUCATION TRUST - PLANS B AND C
ACTUARIAL SOUNDNESS VALUATION REPORT
AS OF SEPTEMBER 30, 2013





Gabriel Roeder Smith & Company
Consultants & Actuaries

20 North Clark Street
Suite 2400
Chicago, IL 60602-5111

312.456.9800 phone
312.456.9801 fax
www.gabrielroeder.com

December 20, 2013

Ms. Robin Lott
Executive Director
Michigan Education Trust
P.O. Box 30198
Lansing, MI 48909

Re: Michigan Education Trust - Plans B and C Actuarial Valuation as of September 30, 2013

Dear Ms. Lott:

Gabriel, Roeder, Smith & Company ("GRS") has performed an actuarial soundness valuation of the Michigan Education Trust - Plans B and C ("MET") as of September 30, 2013. Although the term "actuarial soundness" is not specifically defined, the purpose of this actuarial valuation is to evaluate the financial status of the program as of September 30, 2013.

This report presents the principal results of the actuarial valuation of MET including the following:

- A comparison of the actuarial present value of the obligations for prepaid tuition contracts purchased through September 30, 2013, with the value of the assets associated with the program as of that same date;
- An analysis of the factors which caused the deficit/surplus to change since the prior actuarial valuation; and
- A summary of the actuarial assumptions and methods utilized in the actuarial calculations.

This report was prepared at the request of the MET Board and is intended for use by the MET Board and those designated or approved by the MET Board. This report may be provided to parties other than the MET Board only in its entirety and only with the permission of the MET Board. This report should not be relied on for any purpose other than the purpose described above.

The valuation results set forth in this report are based upon data and information, furnished by MET, concerning program benefits, financial transactions, and beneficiaries of MET. We reviewed this information for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by MET. Further, the data and information provided is through September 30, 2013, and does not reflect subsequent market changes.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The major actuarial assumptions used in this analysis were provided by and are the responsibility of MET and the MET Board. We are unable to judge the reasonableness of some of these assumptions without performing a substantial amount of additional work beyond the scope of the assignment.

Given the current asset allocation and liquidity requirements, the net investment rate of return assumption of 0.90 percent, appears to be consistent with applicable Actuarial Standards of Practice. However, other assumptions could also be reasonable, and could result in materially different results. This assumption was changed from the last valuation.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. We have performed an analysis of the sensitivity of certain changes in future assumptions.

We believe that the actuarial methods used in this report are reasonable and appropriate for the purpose for which they have been used. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial.

This report is not a recommendation to anyone to participate in MET. GRS makes no representations or warranties to any person participating in or considering participation in MET. Current and future participants should be aware that the promises of MET will only be met if the assets of MET are sufficient to pay its obligations.

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Michigan Education Trust - Plans B and C as of September 30, 2013. All calculations have been made in conformity with generally accepted actuarial principles and practices commonly applicable to similar types of arrangements.

The undersigned are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

The signing actuaries are independent of MET.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Sincerely,



Alex Rivera, F.S.A., M.A.A.A., E.A.
Senior Consultant



Paul T. Wood, A.S.A., M.A.A.A., F.C.A.
Consultant

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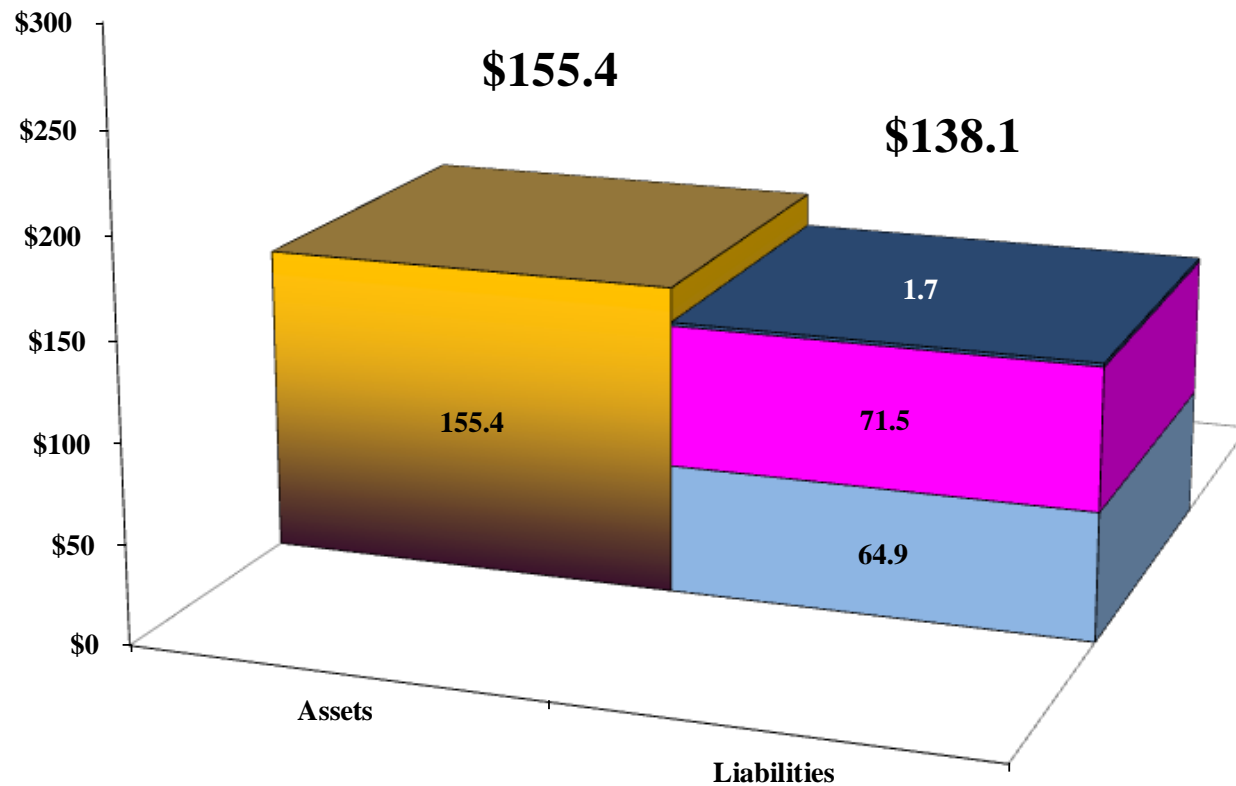
SECTION A
EXECUTIVE SUMMARY

SUMMARY OF RESULTS

Principal Valuation Results

| | Plan B | Plan C | Plans B and C Combined |
|---|--------------------|--------------------|---------------------------|
| Valuation Date: | September 30, 2013 | September 30, 2013 | September 30, 2013 |
| Membership Summary: | | | |
| Counts | | | |
| Not yet in Payment Status | 1,711 | 81 | 1,792 |
| In Payment Status or Termination in Progress | <u>6,148</u> | <u>149</u> | <u>6,297</u> |
| Total | 7,859 | 230 | 8,089 |
| Average Years until Enrollment if not yet in Payment Status | 1.5 | 1.3 | 1.5 |
| Assets | | | |
| · Valuation Assets (Market Value) | \$ 154,059,518 | \$ 1,352,081 | \$ 155,411,599 |
| · Approximate Return on MVA for Year Ended September 30, 2013 | | | 0.58% |
| Actuarial Liabilities (Present Value of Future Tuition Payments, Fees, and Administrative Expenses) | \$ 137,224,321 | \$ 829,659 | \$ 138,053,980 |
| Surplus/(Deficit) | \$ 16,835,197 | \$ 522,422 | \$ 17,357,619 |
| Funded Ratio | 112.3% | 163.0% | 112.6% |

SUMMARY OF ASSETS AND LIABILITIES AS OF SEPTEMBER 30, 2013
Michigan Education Trust - Plans B and C
(\$ in Millions)

**ASSETS**

Net Market Value of Assets

LIABILITIES

PV Administrative Fees

PV Benefits (In Payment Status or
Termination in Progress)

PV Benefits (Not in Payment Status)

Funded Status as of September 30, 2013

| | September 30, 2013 |
|---|--------------------|
| Actuarial Present Value of Future Tuition Payments, Fees and Expenses | \$138,053,980 |
| Market Value of Assets | \$155,411,599 |
| Surplus/(Deficit) as of September 30, 2013 | \$17,357,619 |

Gain/Loss Summary

| | Surplus/(Deficit) |
|---|-------------------|
| (1.) Value at September 30, 2012 | \$ 17,366,472 |
| (2.) Interest on (1.) at Assumed Rate from Previous Valuation | \$ 227,501 |
| (3.) Projected Value at September 30, 2013 [(1.) + (2.)] | \$ 17,593,973 |
| (4.) Change Due to: | |
| a. Asset Experience | \$ (1,179,126) |
| b. Tuition/Fee Inflation | 4,138,280 |
| c. Change in Discount Rate | (1,312,600) |
| d. Other Experience | (1,882,908) |
| (5.) Total [(4.)a. + (4.)b. + (4.)c. + (4.)d.] | \$ (236,354) |
| (6.) Actual Value at September 30, 2013 [(3.) + (5.)] | \$ 17,357,619 |

DISCUSSION

Actuarial Valuation

Gabriel, Roeder, Smith & Company (“GRS”) has performed an actuarial soundness valuation of the Michigan Education Trust - Plans B and C (“MET”) as of September 30, 2013.

The primary purposes of the actuarial soundness valuation are to:

- Determine the actuarial present value of the obligations for prepaid tuition contracts purchased through September 30, 2013, and compare such liabilities with the value of the assets associated with the program as of that same date; and
- Analyze the factors which caused the deficit/surplus to change since the prior actuarial valuation.

This report summarizes the results under the current assumptions and also presents the impact of variances in the rate of tuition and fee increases as well as the rate of investment return on assets.

In addition, the report provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

Background

MET is a public body created by Michigan’s Legislature (Public Act 316 of 1986) and housed within the Michigan Department of Treasury. MET must operate and finance its activities only through its assets. To protect those assets from other uses by the State, only MET, and not the State, controls its assets.

MET allows beneficiaries to lock in future college tuition costs at current prices. The beneficiaries are also eligible for certain federal and state tax advantages.

Three different plan options are available. The **Full Benefits Plan** provides full in-state tuition and mandatory fees at any Michigan public university, or tuition and mandatory fees at Michigan public community colleges (in-district or out-of-district) up to the number of credit hours required for a standard four-year baccalaureate degree (usually 120 semester credit hours). Individuals may purchase the Full Benefits Plan in semester increments up to 10 semesters (five years) of tuition.

The **Limited Benefits Plan** provides in-state tuition and mandatory fees at Michigan public universities, or tuition and mandatory fees at Michigan public community colleges (in-district or out-of-district) up to 105 percent of the weighted average tuition of all Michigan public four-year universities. If a student decides to attend a Michigan public college where tuition costs are higher than average, the number of credits allowed will be prorated based on the number of credit hours MET can purchase with 105 percent of the weighted average cost of Michigan public four-year universities. This plan might not cover the full cost of Michigan’s most expensive institutions.

Students who attend a school where tuition is not fully covered under the Limited Benefits Plan will receive the number of credit hours MET can purchase at the time of college enrollment.

For example, in the 2013/2014 school year:

- If a student with a four-year Limited Benefits Plan contract attends the University of Michigan-Ann Arbor, MET will pay for 100 credit hours.
- If a student attends Michigan Technological University, MET will pay for 104 credit hours.
- If a student attends Michigan State University, MET will pay for 108 credit hours.

Individuals may purchase the Limited Benefits Plan in semester increments up to 10 semesters (five years).

The **Community College Plan** provides in-district tuition and mandatory fees at Michigan public community colleges. Some areas of the State are not within a community college district. Students who attend a community college out of their district will be responsible for paying the difference between the out-of-district and in-district tuition cost. Individuals may purchase the Community College Plan in semester increments up to four semesters (two years) under this contract.

MET Plans B and C are closed to new entrants.

Actuarial Assumptions

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The major actuarial assumptions used in this analysis were provided by and are the responsibility of MET.

In the previous actuarial soundness valuation as of September 30, 2012, a discount rate assumption of 1.31 percent and a tuition increase assumption of 7.1 percent for the first five years and 4.5 percent, thereafter were used. Each year, the discount rate and tuition increase assumption are reviewed for reasonableness. Staff at the Department of Treasury then recommends updated assumptions to the MET Board. The recommended assumptions for the actuarial soundness valuation as of September 30, 2013, are as follows:

- Discount Rate: 0.90 percent.
- Tuition Increase Assumption: 7.1 percent for the first four years and 4.5 percent, thereafter.

The MET Board approved these assumptions for use in the September 30, 2013, actuarial soundness valuation at its August 15, 2013 meeting. The impact of the change in the discount rate can be seen in Exhibit II on page 10.

Consistent with the previous actuarial soundness valuation, no death and disability rates are assumed.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. We have performed an analysis of the sensitivity of certain changes in future assumptions.

Financial Status of Program

As of September 30, 2013, the present value of all future tuition obligations under contracts outstanding (and including estimated future administrative expenses) at that date is \$138.1 million. Fund assets as of September 30, 2013, including only the market value of program assets, are \$155.4 million.

The difference between the market value of assets of \$155.4 million and program obligations of \$138.1 million represents a program surplus of \$17.3 million. The comparable program surplus as of the last actuarial valuation as of September 30, 2012, was \$17.4 million.

Under the approved assumptions, the program is 112.6 percent funded and is expected to pay all contracted benefits.

Gain/Loss Analysis

As described above, the program surplus slightly decreased from \$17.4 million as of September 30, 2012, to \$17.3 million as of September 30, 2013. The change in discount rate and unfavorable investment returns decreased the surplus whereas tuition increases lower than expected and unfavorable demographic experience increased the surplus.

Benefit Provisions

We understand there were no changes in the program provisions since the last actuarial valuation as of September 30, 2012.

Assets

MET assets are held in trust. MET provided the asset information used in the September 30, 2013, actuarial valuation.

This report contains several exhibits summarizing the plan's assets, including a summary of the market value of assets broken down by asset category and a reconciliation of the assets from the last valuation date to the current valuation date.

SECTION B

VALUATION RESULTS

Exhibit I**Principal Valuation Results as of September 30, 2013**

| | 2013 | 2012 |
|---|----------------|----------------|
| 1 Number of Members | | |
| a. Not yet in Payment Status: | 1,792 | 1,952 |
| b. In Payment Status or Termination in Progress: | 6,297 | 7,520 |
| c. Total | 8,089 | 9,472 |
| Average Years until Enrollment if Not Yet In Payment Status | 1.5 | 1.1 |
| 2 Assets | | |
| a. Market Value of Assets (in Trust) | \$ 155,411,599 | \$ 174,361,361 |
| b. PV Future Member Contributions | - | - |
| c. Total Market Value of Assets (MVA) | \$ 155,411,599 | \$ 174,361,361 |
| 3 Actuarial Results | | |
| Liabilities - Tuition and Fees | | |
| a. Not yet in Payment Status: | \$ 64,934,699 | \$ 68,934,306 |
| b. In Payment Status or Termination in Progress: | 71,428,909 | 85,662,522 |
| c. Total | \$ 136,363,608 | \$ 154,596,828 |
| Liabilities - Present Value of Future Administrative Expenses | \$ 1,690,372 | \$ 2,398,061 |
| Liabilities Total | \$ 138,053,980 | \$ 156,994,889 |
| Surplus/(Deficit) | \$ 17,357,619 | \$ 17,366,472 |
| Funded Ratio | 112.6% | 111.1% |

Exhibit I**Principal Valuation Results as of September 30, (Continued)**

| | <u>2013</u> | <u>2012</u> |
|---|-------------------|-------------------|
| 1 Market Value of Assets (in Trust) | \$ 155,411,599 | \$ 174,361,361 |
| 2 Actuarial Present Value of Tuition, Fees and Admin Expenses | | |
| a. Short Term ^a | \$ 59,854,529 | \$ 66,655,907 |
| b. Long Term ^b | <u>78,199,451</u> | <u>90,338,982</u> |
| c. Total | \$ 138,053,980 | \$ 156,994,889 |
| Surplus/(Deficit) | \$ 17,357,619 | \$ 17,366,472 |
| Funded Ratio | 112.6% | 111.1% |

^a Present value of amounts in following year.

^b Present value of amounts after first year.

Exhibit II
Gain/Loss Summary

| | Present Value of Benefits | Valuation Assets | Surplus/(Deficit) |
|---|---------------------------|------------------|-------------------|
| (1.) Values at September 30, 2012 | \$ 156,994,889 | \$ 174,361,361 | \$ 17,366,472 |
| (2.) Contributions/Miscellaneous Income | \$ - | \$ - | \$ - |
| (3.) Benefit Payments | \$ (19,924,688) | \$ (19,924,688) | \$ - |
| (4.) Interest on (1.), (2.), and (3.) at Assumed Rate from Previous Valuation | \$ 1,926,551 | \$ 2,154,052 | \$ 227,501 |
| (5.) Projected Values at September 30, 2013 [(1.) + (2.) + (3.) + (4.)] | \$ 138,996,752 | \$ 156,590,725 | \$ 17,593,973 |
| (6.) Change Due to: | | | |
| a. Asset Experience | \$ - | \$ (1,179,126) | \$ (1,179,126) |
| b. Tuition/Fee Inflation | (4,138,280) | - | 4,138,280 |
| c. Change in Discount Rate | 1,312,600 | - | (1,312,600) |
| d. Other Experience | 1,882,908 | - | (1,882,908) |
| (7.) Total [(6.)a. + (6.)b. + (6.)c. + (6.)d.] | \$ (942,772) | \$ (1,179,126) | \$ (236,354) |
| (8.) Actual Values at September 30, 2013 [(5.) + (7.)] | \$ 138,053,980 | \$ 155,411,599 | \$ 17,357,619 |

Exhibit III
Sensitivity Testing Results

The actuarial assumptions regarding future increases in tuition costs and fees and the future rate of investment return were prescribed to us by MET. In our opinion, the assumptions prescribed to us are reasonable for the purpose of the measurement. However, no one knows with certainty what the future holds with respect to economic and other contingencies. For example, while it is assumed that the assets of the fund will earn 0.90 percent each year throughout the life of the contracts, actual returns are expected to vary from year to year. Therefore, we have projected MET results under alternative assumptions for future investment income and tuition increases, as follow:

1. Current valuation assumptions approved by the MET Board (0.90 percent investment return, 7.1/4.5 percent tuition increases).
2. Tuition increases are 100 basis points higher/lower in each future year than assumed in this year's actuarial soundness valuation.
3. The investment return is 90 basis points higher/lower in each future year than assumed in this year's actuarial soundness valuation.
4. Tuition increases are 100 basis points higher and the investment return is 90 basis points lower in each future year than assumed in this year's actuarial soundness valuation.
5. Tuition increases are 100 basis points lower and the investment return is 90 basis points higher in each future year than assumed in this year's actuarial soundness valuation.

The impact of each of these scenarios on the principal valuation results is presented on the following page.

Exhibit III
Sensitivity Testing Results (Continued)

\$ in Millions

| | Current Valuation Assumptions | Assumed Tuition Increases +100 Basis Points | Assumed Tuition Increases -100 Basis Points | Assumed Investment Return +90 Basis Points | Assumed Investment Return -90 Basis Points | Assumed Tuition Increases +100 Basis Points and Investment Return -90 Basis Points | Assumed Tuition Increases -100 Basis Points and Investment Return +90 Basis Points |
|--|-------------------------------------|---|---|---|---|---|---|
| Assumed Investment Return | 0.90% | 0.90% | 0.90% | 1.80% | 0.00% | 0.00% | 1.80% |
| Assumed Tuition Increases | 7.1%/4.5% | 8.1%/5.5% | 6.1%/3.5% | 7.1%/4.5% | 7.1%/4.5% | 8.1%/5.5% | 6.1%/3.5% |
| 1 Assets | | | | | | | |
| a. Market Value of Assets (in Trust) | \$155.4 | \$155.4 | \$155.4 | \$155.4 | \$155.4 | \$155.4 | \$155.4 |
| b. PV Future Member Contributions | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| c. Total Market Value of Assets (MVA) | \$155.4 | \$155.4 | \$155.4 | \$155.4 | \$155.4 | \$155.4 | \$155.4 |
| 2 Actuarial Results | | | | | | | |
| Liabilities - Tuition and Fees | | | | | | | |
| a. Not yet in Payment Status: | \$64.9 | \$66.9 | \$63.1 | \$62.6 | \$67.2 | \$69.4 | \$60.9 |
| b. In Payment Status or Termination in Progress: | 71.4 | 71.8 | 71.1 | 70.7 | 72.1 | 72.5 | 70.3 |
| c. Total | \$136.4 | \$138.7 | \$134.1 | \$133.3 | \$139.3 | \$141.9 | \$131.2 |
| Liabilities - PV of Future Admin. Expenses | \$1.7 | \$1.7 | \$1.7 | \$1.6 | \$1.7 | \$1.7 | \$1.6 |
| Liabilities Total | \$138.1 | \$140.4 | \$135.8 | \$134.9 | \$141.1 | \$143.6 | \$132.9 |
| Surplus/(Deficit) | \$17.3 | \$15.0 | \$19.6 | \$20.5 | \$14.3 | \$11.8 | \$22.5 |
| Funded Ratio | 112.6% | 110.7% | 114.4% | 115.2% | 110.2% | 108.2% | 117.0% |
| Difference From Results Based on Current Assumptions | | | | | | | |
| Surplus | \$0.0 | (\$2.3) | \$2.3 | \$3.2 | (\$3.0) | (\$5.5) | \$5.2 |
| Funded Ratio | 0.0% | (2.0%) | 1.8% | 2.5% | (2.5%) | (4.4%) | 4.3% |

SECTION C
FUND ASSETS

**STATEMENT OF PLAN ASSETS
(ASSETS AT MARKET VALUE)****Michigan Education Trust - Plans B and C****Statement of Plan Net Assets****Year ended September 30, 2013**

| | |
|---|------------------------------|
| 1. Cash and cash equivalents | \$ 7,527,573 |
| 2. Investments | |
| a. Short-term Investments | \$ 19,992,308 |
| b. Unamortized discount on short-term investments | 7,069 |
| c. Bonds | 117,627,363 |
| Total investments | <u>\$ 137,626,741</u> |
| 3. Receivables | |
| a. Advances to state general fund | \$ 6,833,007 |
| b. Interest and dividends receivable | 622,709 |
| c. Due from others | 3,023,012 |
| Total receivables | <u>\$ 10,478,727</u> |
| 4. Liabilities | |
| a. Undisbursed charitable tuition | \$ - |
| b. Compensated absences | 221,442 |
| Total liabilities | <u>\$ 221,442</u> |
| 5. Net assets = (1) + (2) + (3) - (4) | <u><u>\$ 155,411,599</u></u> |

RECONCILIATION OF PLAN ASSETS

Michigan Education Trust - Plans B and C

Statement of Changes in Plan Net Assets

Twelve Month Period ended September 30, 2013

| | |
|---|------------------------------|
| 1. Value of assets at beginning of year | \$ 174,361,361 |
| 2. Changes during year | |
| a. Additions | |
| (1) Investment income | \$ 3,203,537 |
| (2) Miscellaneous income | 22,997 |
| (3) Net gain on sale of security | (656,117) |
| Total Additions = (1) + (2) + (3) | <u>\$ 2,570,416</u> |
| b. Deductions | |
| (1) Administrative and other expenses | \$ 604,925 |
| (2) Amounts paid under contracts | |
| (a) Tuition benefits | 11,396,477 |
| (b) Termination benefits | |
| [1] Paid to colleges | \$ 2,891,326 |
| [2] Loan defaults/Death refunds | 21,976 |
| [3] Paid to refund designee | 5,009,985 |
| Total termination benefits | <u>\$ 7,923,287</u> |
| Total paid under contracts = (a) + (b) | <u>\$ 19,319,763</u> |
| Total Deductions = (1) + (2) | <u>\$ 19,924,688</u> |
| c. Unrealized appreciation (depreciation) | <u>\$ (1,595,490)</u> |
| Net increases (decreases) during year = a - b + c | <u>\$ (18,949,762)</u> |
| Net value of assets at end of year = 1 + 2 | <u><u>\$ 155,411,599</u></u> |

SECTION D

PARTICIPANT DATA

HISTORICAL SUMMARY AS OF SEPTEMBER 30, 2013

| | <u>2013</u> | <u>2012</u> | <u>2011</u> | <u>2010</u> | <u>2009</u> |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <u>Number of Contracts</u> | | | | | |
| Full benefits | 7,816 | 9,168 | 10,769 | 12,813 | 15,625 |
| Limited benefits | 43 | 52 | 71 | 94 | 108 |
| Community college | <u>230</u> | <u>252</u> | <u>288</u> | <u>331</u> | <u>388</u> |
| Total | <u>8,089</u> | <u>9,472</u> | <u>11,128</u> | <u>13,238</u> | <u>16,121</u> |
| <u>Assets</u> | | | | | |
| Market value | <u>\$155,411,599</u> | <u>\$174,361,361</u> | <u>\$200,210,892</u> | <u>\$242,222,834</u> | <u>\$299,200,593</u> |

CONTRACT DATA SUMMARY

| | Lump Sum | | | Monthly Purchase | | | <u>Total</u> |
|------------------------------|-----------------------------|--------------------------------|---------------------------------|-----------------------------|--------------------------------|---------------------------------|---------------------|
| | <u>Full Benefits</u> | <u>Limited Benefits</u> | <u>Community College</u> | <u>Full Benefits</u> | <u>Limited Benefits</u> | <u>Community College</u> | |
| Total as of 9/30/2012 | 8,687 | 52 | 239 | 481 | 0 | 13 | 9,472 |
| Adjustment for prior years | (42) | 1 | (1) | 1 | 0 | 0 | (41) |
| New contracts issued | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Contracts paid in full | <u>(1,218)</u> | <u>(10)</u> | <u>(19)</u> | <u>(93)</u> | <u>0</u> | <u>(2)</u> | <u>(1,342)</u> |
| Total as of 9/30/2013 | <u>7,427</u> | <u>43</u> | <u>219</u> | <u>389</u> | <u>0</u> | <u>11</u> | <u>8,089</u> |

CONTRACTS IN PAYMENT STATUS AS OF SEPTEMBER 30, 2013

| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|---|--|---|--|---------------------|
| 1. Michigan Public 4-Year College | | | | |
| Central Michigan University | 279 | 1 | 0 | 280 |
| Eastern Michigan University | 212 | 2 | 0 | 214 |
| Ferris State University | 150 | 0 | 0 | 150 |
| Grand Valley State University | 195 | 2 | 0 | 197 |
| Lake Superior State University | 18 | 0 | 0 | 18 |
| Michigan State University | 793 | 1 | 0 | 794 |
| Michigan Technological University | 74 | 1 | 0 | 75 |
| Northern Michigan University | 70 | 0 | 0 | 70 |
| Oakland University | 173 | 1 | 0 | 174 |
| Saginaw Valley State University | 52 | 0 | 0 | 52 |
| University of Michigan-Dearborn | 84 | 0 | 0 | 84 |
| University of Michigan-Flint | 44 | 0 | 0 | 44 |
| University of Michigan-Ann Arbor | 352 | 0 | 0 | 352 |
| Wayne State University | 201 | 1 | 0 | 202 |
| Western Michigan University | <u>320</u> | <u>2</u> | <u>0</u> | <u>322</u> |
| Total Michigan Public 4-Year College | <u>3,017</u> | <u>11</u> | <u>0</u> | <u>3,028</u> |

CONTRACTS IN PAYMENT STATUS AS OF SEPTEMBER 30, 2013 (CONT'D)

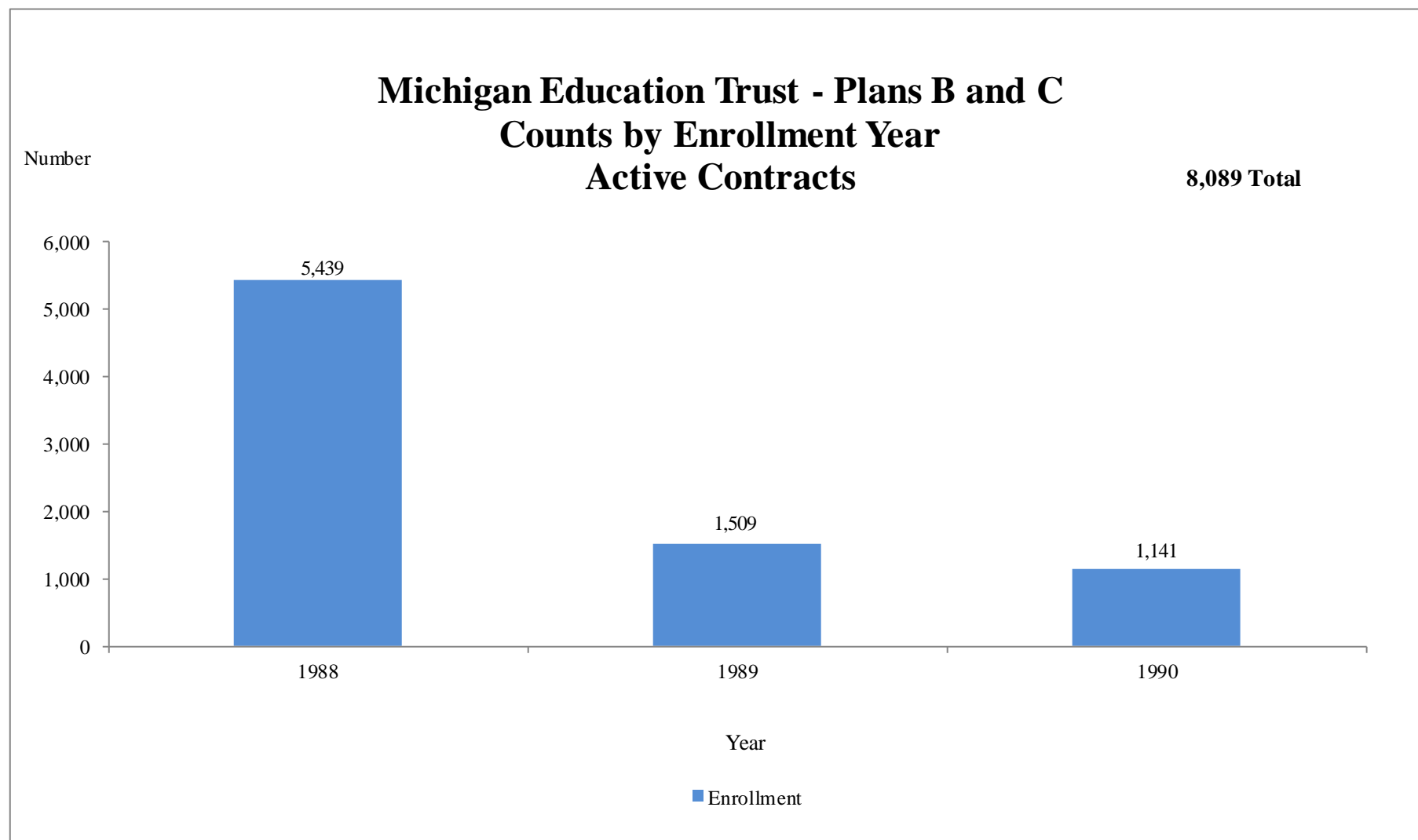
| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|---|--|---|--|---------------------|
| 2. Michigan Community College | | | | |
| Alpena Community College | 1 | 0 | 1 | 2 |
| Bay De Noc Community College | 4 | 0 | 0 | 4 |
| Delta College | 26 | 0 | 3 | 29 |
| Glen Oaks Community College | 1 | 0 | 0 | 1 |
| Gogebic Community College | 0 | 0 | 0 | 0 |
| Grand Rapids Community College | 54 | 0 | 10 | 64 |
| Henry Ford Community College | 58 | 1 | 4 | 63 |
| Jackson Community College | 18 | 0 | 11 | 29 |
| Kalamazoo Valley Community College | 26 | 0 | 2 | 28 |
| Kellogg Community College | 4 | 0 | 3 | 7 |
| Kirtland Community College | 3 | 0 | 1 | 4 |
| Lake Michigan Community College | 14 | 0 | 1 | 15 |
| Lansing Community College | 137 | 1 | 19 | 157 |
| Macomb County Community College | 114 | 1 | 15 | 130 |
| Mid-Michigan Community College | 18 | 0 | 2 | 20 |
| Monroe Community College | 15 | 0 | 0 | 15 |
| Montcalm Community College | 1 | 0 | 0 | 1 |
| Mott Community College | 35 | 1 | 6 | 42 |
| Muskegon Community College | 9 | 0 | 4 | 13 |
| North Central Michigan College | 7 | 0 | 0 | 7 |
| Northwestern Michigan College | 33 | 1 | 7 | 41 |
| Oakland Community College | 181 | 1 | 14 | 196 |
| Schoolcraft College | 105 | 1 | 10 | 116 |
| Southwestern Michigan College | 3 | 0 | 0 | 3 |
| St. Clair County Community College | 14 | 0 | 1 | 15 |
| Washtenaw Community College | 95 | 0 | 5 | 100 |
| Wayne County Community College | 31 | 0 | 3 | 34 |
| West Shore Community College | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| Total Michigan Community College | <u>1,010</u> | <u>7</u> | <u>122</u> | <u>1,139</u> |
| Total Active Contracts (1.) + (2.) | <u>4,027</u> | <u>18</u> | <u>122</u> | <u>4,167</u> |

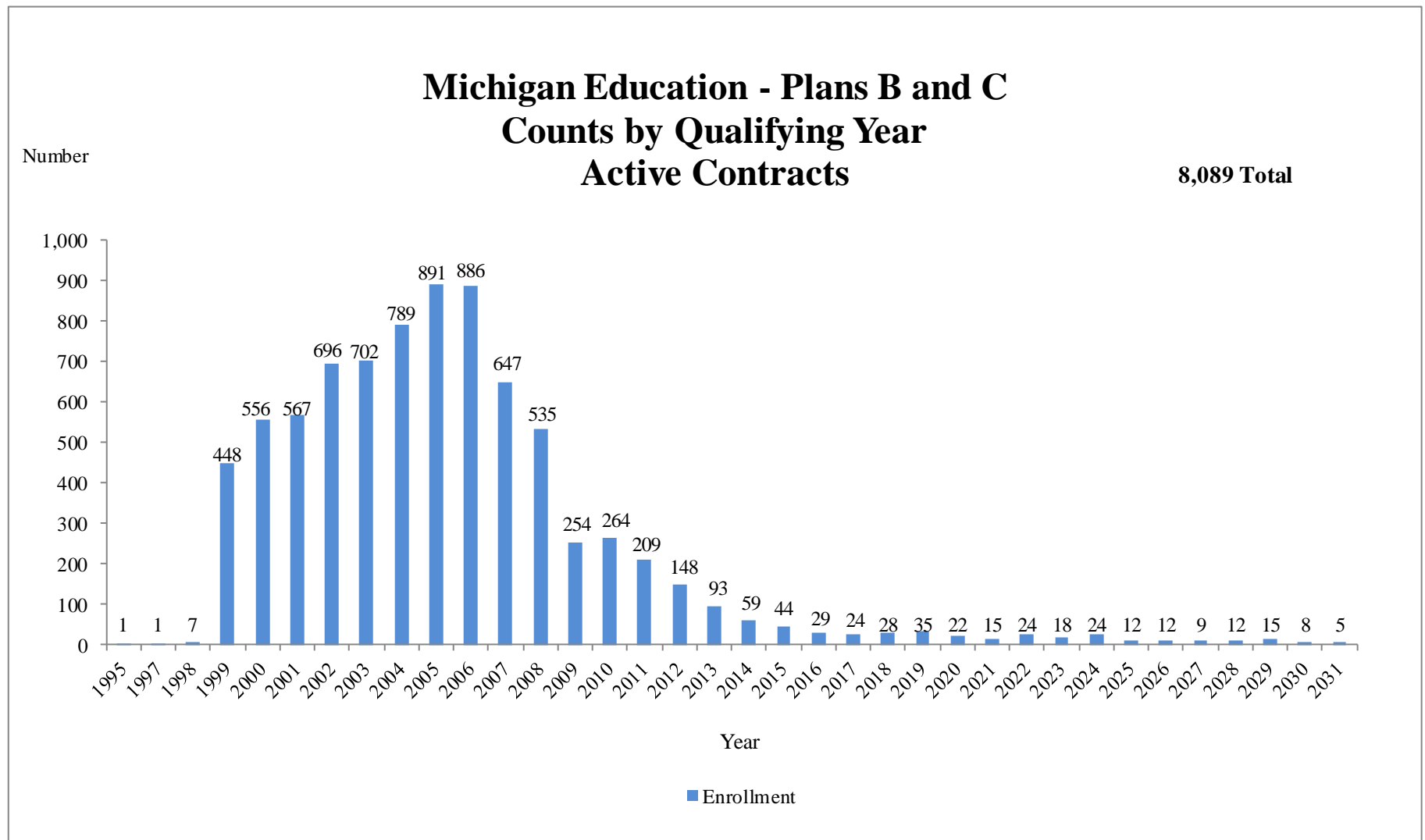
CONTRACTS IN PAYMENT STATUS AS OF SEPTEMBER 30, 2013 (CONT'D)

| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|---|--|---|--|---------------------|
| 3. Terminations in Progress | | | | |
| Reason: | | | | |
| Michigan Independent College | 195 | 0 | 4 | 199 |
| Out-of-State/Pay College | 398 | 1 | 2 | 401 |
| Out-of-State/Pay Refund Designee | 15 | 1 | 0 | 16 |
| Full Scholarship | 13 | 0 | 1 | 14 |
| Not Attending College | 228 | 3 | 0 | 231 |
| Attending Community College with Full/Limited Benefits Contract | 129 | 3 | 0 | 132 |
| Attending 4 - year College with Community College Contract | 0 | 0 | 4 | 4 |
| Other (Military) | <u>4</u> | <u>0</u> | <u>0</u> | <u>4</u> |
| Total Terminations in Progress | <u>982</u> | <u>8</u> | <u>11</u> | <u>1,001</u> |
| 4. Inactive Students | <u>1,106</u> | <u>7</u> | <u>16</u> | <u>1,129</u> |
| Grand Total, Contracts in Payment Status (1.) + (2.) + (3.) + (4.) | <u>6,115</u> | <u>33</u> | <u>149</u> | <u>6,297</u> |
| 5. Not Yet in Payment Status | <u>1,701</u> | <u>10</u> | <u>81</u> | <u>1,792</u> |
| Grand Total, Active Contracts (1.) + (2.) + (3.) + (4.) + (5.) | <u>7,816</u> | <u>43</u> | <u>230</u> | <u>8,089</u> |

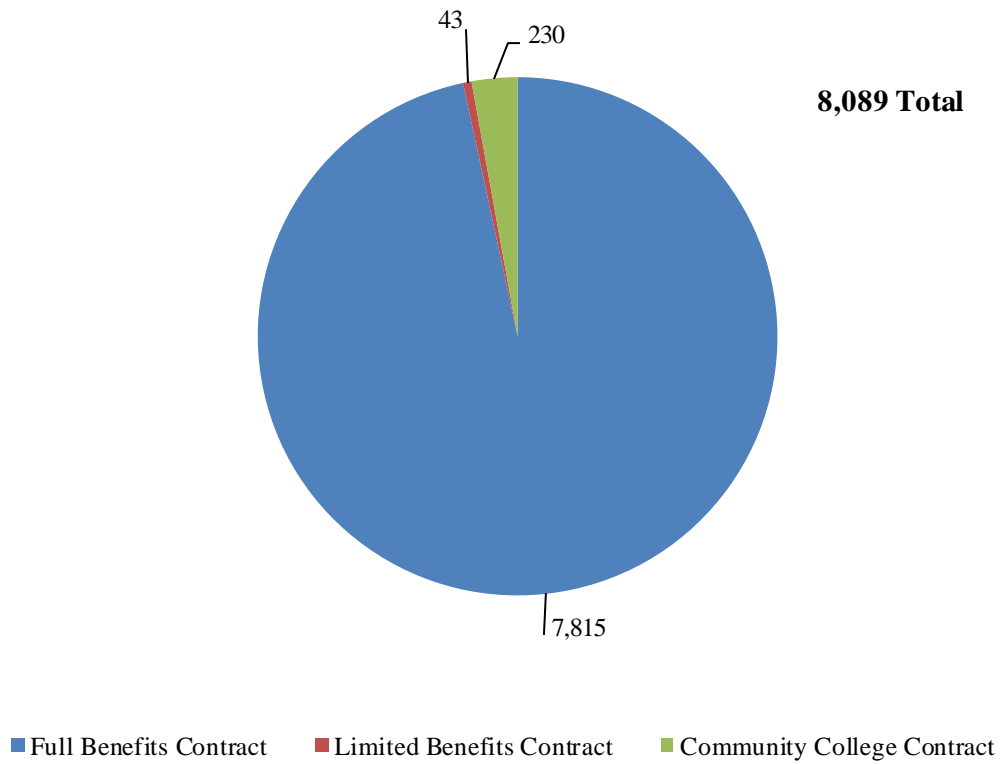
CONTRACTS PAID IN FULL IN THE YEAR ENDING SEPTEMBER 30, 2013

| | Lump Sum | | | Monthly Purchase | | | |
|---|--------------------------------|-----------------------------------|------------------------------------|--------------------------------|-----------------------------------|------------------------------------|---------------------|
| | <u>Full</u> <u>Benefits</u> | <u>Limited</u> <u>Benefits</u> | <u>Community</u> <u>College</u> | <u>Full</u> <u>Benefits</u> | <u>Limited</u> <u>Benefits</u> | <u>Community</u> <u>College</u> | <u>Total</u> |
| 1. Attended Public Colleges | 694 | 5 | 7 | 67 | 0 | 1 | 774 |
| 2. Terminations | | | | | | | |
| Michigan Independent College | 116 | 2 | 0 | 5 | 0 | 0 | 123 |
| Out-of-State/Pay College | 104 | 0 | 1 | 4 | 0 | 0 | 109 |
| Out-of-State/Pay Refund Designee | 10 | 1 | 0 | 1 | 0 | 0 | 12 |
| Full Scholarship | 21 | 0 | 0 | 1 | 0 | 0 | 22 |
| Not Attending College | 209 | 2 | 7 | 12 | 0 | 0 | 230 |
| Disability/Death | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Attending Community College with Full Benefits Contract | 58 | 0 | 0 | 2 | 0 | 0 | 60 |
| Attending 4 - year College with Community College Contract | 0 | 0 | 4 | 0 | 0 | 1 | 5 |
| Other (Military) | <u>2</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| Total Terminations | <u>524</u> | <u>5</u> | <u>12</u> | <u>26</u> | <u>0</u> | <u>1</u> | <u>568</u> |
| Total Contracts Paid in Full | <u>1,218</u> | <u>10</u> | <u>19</u> | <u>93</u> | <u>0</u> | <u>2</u> | <u>1,342</u> |





Michigan Education Trust - Plans B and C
Counts by Contract Type
Active Contracts



SECTION E

METHODS & ASSUMPTIONS

VALUATION METHODS AND ASSUMPTIONS

The actuarial assumptions used in the valuation are shown in this Section.

Measurement Date September 30, 2013

The net investment return rate 0.90 percent per annum, compounded annually

Weighted Average Tuition and Increases by Contract Type

| | Four Year Public College | Community College |
|--|--------------------------|-------------------|
| Weighted Average Tuition and Fees | \$12,005 | \$3,242 |
| Average Tuition and Fees | \$11,635 | \$3,461 |
| Lowest Tuition and Fees | \$9,638 | \$2,438 |
| Tuition and Fees Increase Assumption - Years One through Five | 7.10% | 7.10% |
| Tuition and Fees Increase Assumption - After Year Five | 4.50% | 4.50% |

The Weighted Average Tuition and Fees used in the actuarial soundness valuation are based on preliminary tuition and fees for 2013/2014.

The Tuition and Fee increase assumptions were chosen by the Board and consider historical public tuition and fee inflation over a 5 to 10-year horizon, as well as current economic and political conditions.

Administrative Expenses

Administrative expenses of the Program are assumed to be paid through a combination of investment earnings and fees assessed on purchasers. Total administrative expenses budgeted for MET Plans B and C and MET Plan D net of advertising and public relations expenses is equal to \$3,167,870. This amount was prorated by the number of active contracts in MET Plans B and C vs. MET Plan D. Therefore, the amount budgeted for MET Plans B and C in 2013-2014 is \$593,624.

Bias Load

A load of 10.0 percent was added to the WAT for all contract types to recognize the bias toward enrollment at more expensive schools.

Experience Load

Two features of the program may cause greater payments than expected. These two features are a) the ability of a beneficiary to attend a college for which block pricing is in effect resulting in the possibility of having the program pay for more years than purchased and b) the ability of a beneficiary to have more than 120 hours covered (even though, for example, four years of coverage was purchased) due to being in a specific program requiring more than 120 hours for an undergraduate degree (e.g. Engineering). A load of 2.0 percent was added to all liabilities to account for this.

Future Contract Sales

MET Plans B and C are closed to new entrants.

Utilization of Benefits (applies only to members that have not begun utilizing benefits)

Beneficiaries are assumed to use the benefits as defined in the contract beginning in their qualifying year and subsequently according to the following schedule:

| Distribution of Benefit Utilization | | | | |
|--|---------------------------|-------|-------|-------------|
| Number of Years Since Benefit Utilization Begins | Number of Years Purchased | | | |
| | 0 - 1 | 1 - 2 | 2 - 3 | More than 3 |
| 1 | 85% | 45% | 33% | 24% |
| 2 | 10% | 30% | 25% | 24% |
| 3 | 5% | 15% | 18% | 20% |
| 4 | | 5% | 12% | 18% |
| 5 | | 5% | 7% | 7% |
| 6 | | | 3% | 3% |
| 7 | | | 2% | 2% |
| 8 | | | | 1% |
| 9 | | | | 1% |

Utilization of Benefits (applies only to members that have begun utilizing benefits)

Once a beneficiary has begun using benefits, it is assumed that beneficiaries will utilize 30 credits per year until benefits are fully depleted.

Contract Terminations

| Refund Type | Refund | Amount of Refund - Full or Limited Benefits | Amount of Refund - Community College Benefits | Termination Code and Code Description | Distribution of Contract Termination | | |
|-----------------------|--------------------------|---|---|---|--------------------------------------|------------------|----------------------------|
| | | | | | Full Benefits | Limited Benefits | Community College Benefits |
| 1 | Weighted Average Tuition | \$ 12,005 | \$ 3,242 | 1 - Attend Mich. Independent college direct refund to college | 25.0% | 24.5% | 10.0% |
| 2 | Average Tuition* | \$ 11,635 | \$ 3,461 | 2 - Attend out of state college - direct refund to college 4 - Full scholarship | 43.0% | 18.0% | 11.0% |
| 3 | Lowest Tuition | \$ 9,638 | \$ 2,438 | 3 - Attend Mich. Independent or out of state college - direct refund to refund designee 5 - Will not attend college 10 - Other (military) | 28.0% | 47.5% | 29.0% |
| 4 | Lowest Tuition | \$ 9,638 | N/A | 7 - Purchase full or limited benefit, but attend community college | 4.0% | 10.0% | 0.0% |
| 5 | Community College WAT | N/A | \$ 3,242 | 8 - Purchase community college, but attend 4-yr public college | 0.0% | 0.0% | 50.0% |
| 6 | Lowest Tuition | \$ 9,638 | \$ 2,438 | 6 - Death or disability | 0.0% | 0.0% | 0.0% |
| Average Refund | | | | | \$ 11,089 | \$ 10,577 | \$ 3,033 |

*Not applicable to Limited Benefits Contracts

The Weighted Average Tuition and Fees used in the actuarial soundness valuation are based on preliminary tuition and fees for 2013/2014.

Refunds are paid out in accordance with the contract provisions over a period of 4 years for full and limited benefit contracts and 2 years for community college contracts.

Probability of Refund in Qualifying Year

| Years from Qualifying Year at Time of Valuation | Full Benefits | Limited Benefits | Community College |
|---|---------------|------------------|-------------------|
| -2 or more | 29% | 32% | 54% |
| -1 | 15% | 16% | 28% |
| 0 | 10% | 11% | 19% |
| 1 | 8% | 8% | 14% |
| 2 | 6% | 6% | 10% |
| 3 | 4% | 4% | 8% |
| 4 | 3% | 3% | 6% |
| 5 | 2% | 2% | 3% |
| 6 | 1% | 1% | 2% |
| 7 | 1% | 1% | 1% |
| 8 or more | 0% | 0% | 0% |

Negative values represent period to qualifying year, positive values represent period after qualifying year.

Mortality and disability

No assumption is made for death or disability. Valuing the rate of incidence is expected to be immaterial.

SECTION F
PLAN PROVISIONS

PLAN PROVISIONS

A. Issue Years : 1988, 1989, and 1990

B. Benefit Provisions

1. Full Benefits Plan

| | |
|-----------------------------------|--|
| a. Michigan Public 4-Year College | Full benefits plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to four years. |
| b. Community College | If the beneficiary elects to attend a community college, MET will pay the community college tuition cost or the lowest university tuition cost, depending on the options selected by the beneficiary. |
| c. Michigan Independent College | If the beneficiary elects to attend a Michigan independent college, the contract may be terminated, and MET will pay tuition to the independent college based on the weighted average tuition cost. If the payment is not made to the college, the amount will be based on the lowest tuition. |
| d. Out-of-State College | If the beneficiary elects to attend an out-of-state college, the contract may be terminated, and MET will pay to the college four annual installments based on the average tuition cost. If payment is not made to the college, the amount will be based on the lowest tuition. |
| e. Full Scholarship | If the beneficiary receives a full scholarship, the contract may be terminated, and MET will pay four annual installments based on the average tuition cost. |
| f. Death or Disability | If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated, and MET will pay one installment based on the lowest tuition cost. |
| g. No College | If the beneficiary does not attend college, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |

2. Limited Benefits Plan

- | | |
|-----------------------------------|---|
| a. Michigan Public 4-Year College | Limited benefits plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to four years not to exceed 105% of the WAT. However, if tuition and mandatory fees exceed 105% of the WAT, the beneficiary is provided a reduced number of credit hours. |
| b. Community College | If the beneficiary elects to attend a community college, MET will pay the community college tuition cost or the lowest university tuition cost, depending on options selected by the beneficiary. |
| c. Michigan Independent College | If the beneficiary elects to attend a Michigan independent college, the contract may be terminated, and MET will provide funds to the independent college based on the weighted average tuition at the colleges with tuition less than 105% of the weighted average tuition. If payment is not made to the college, the amount will be based on the lowest tuition. |
| d. Out-of-State College | If the beneficiary elects to attend an out-of-state college, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |
| e. Full Scholarship | If the beneficiary receives a full scholarship, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |
| f. Death or Disability | If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated, and MET will pay one installment based on the lowest tuition cost. |
| g. No College | If the beneficiary does not attend college, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |

3. Community College Plan

- | | |
|---------------------------|---|
| a. Community College | Community college plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to two years. |
| b. Other Michigan College | If the beneficiary elects to attend a Michigan four-year public college or a Michigan independent college, the contract may be terminated, and MET will pay tuition to the college in two annual installments as needed based on the community college weighted average tuition cost in the year prior to the contract termination. |
| c. Out-of-State College | If the beneficiary elects to attend an out-of-state college, the contract may be terminated, and MET will pay to the college two annual installments based on the community college average tuition cost. If payment is not made to the college, the amount will be based on the lowest tuition. |
| d. Full Scholarship | If the beneficiary receives a full scholarship, the contract may be terminated, and MET will pay two annual installments based on the community college average tuition cost. |
| e. Death or Disability | If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated, and MET will pay one installment based on the community college lowest tuition cost. |
| f. No College | If the beneficiary does not attend college, the contract may be terminated, and MET will pay two annual installments based on the community college lowest tuition cost. |

- | | |
|--------------------|--|
| C. Transferability | If the contract is transferred to an older beneficiary, MET may charge additional costs, which include a transfer fee, the cost differential between beneficiary ages/grades and MET's loss of investment income. If the older beneficiary accepts the academic year of the original beneficiary, the additional cost can be waived. |
|--------------------|--|

D. Loans

If a purchaser defaults on a loan secured by the contract, MET will reimburse the savings institution for the default, and will reduce the amount of benefits purchased in proportion to the amount remaining after the payment to the savings institution.

E. Monthly Purchase

The purchaser of a monthly purchase contract purchases a percent of educational benefits with every monthly purchase amount which is received by MET. A purchaser may choose to make monthly payments over 4, 7, 10, or 15 years.